Salinity and water logging in irrigated commands

442. DR. GYAN PRAKASH PILANIA:
SHRI LALIT KISHORE CHATURVEDI:

Will the Minister of WATER RESOURCES be pleased to state:

(a) the magnitude of salinity and water logging in irrigated commands, State-wise;

(b) the reasons therefor; and

(c) the corrective steps taken and their effectivity?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAI PRAKASH NARAYAN YADAV): (a) Central Water Commission has recently carried out a study on "Assessment of water logging, saline and/ or alkaline soils in the commands of all major and medium irrigation commands in all the States of India and Union Territories, using satellite remote sensing". The State-wise data is given in the Statement (*See* below).

(b) With the start of the planned irrigation development in the post independence era, farmers started using irrigation water in the irrigated commands. In areas, where drainage was not adequate, this resulted in the rise of ground water table causing water logging and the seepage from unlined canals further contributed to the Problem. The rise in ground water table brought the excessive harmful salts on the land surface causing salinity.

(c) Both preventive as well as ameliorative measures are being taken to check water logging and salinity. The preventive measures include lining of canals in vulnerable reaches, on-farm development works such as construction of lined field channels and drains, rotational supply (warabandi) of irrigation water to farmers, conjunctive use of surface and ground water, propagation of improved methods of irrigation among farmers through training, adaptive trials and demonstrations.

Ameliorative measures include construction of surface and sub-surface drains, vertical drainage and bio-drainage for disposal of excess water and leaching of soil to flush out excess salts from root zone of crops. The above measures have proved effective in checking water logging and salinity.

Statement

The State-wise magnitude of salinity and water logging in irrigated commands of Major and Medium Irrigation Projects as per Remote Sensing Study carried out by Central Water Commission

Sl. No.	State	Water logged area (in thousand hectare)	Salt affected area (in thousand hectare)
1	2	3	4
1.	Andhra Pradesh	28.267	12.933
2.	Bihar	627.89	156.89
3.	Jharkhand	Nil	Nil

1	2	3	4
4.	Goa	Nil	Nil
5.	Gujarat	265.26	307.32
6.	Haryana	16.46	19.39
7.	Himachal Pradesh	0.26	Nil
8.	Jammu and Kashmir	3.97	0.075
9.	Karnataka	Nil	5.78
10.	Kerala	12.33	3.997
11.	Madhya Pradesh	0.54	4.41
12.	Chhattisgarh	Nil	Nil
13.	Maharashtra	426.40	34.54
14.	Orissa	85.99	34.78
15.	Punjab	34.97	132.00
16.	Rajasthan	8.41	2.044
17.	Tamil Nadu	27.22	30.61
18.	Uttar Pradesh	126.68	283.14
19.	Uttarakhand	0.22	0.0134
20.	West Bengal	46.4	6.47
21.	N.E. States	2.66	0
22.	U.T. (Puducherry)	0.047	0.053
	TOTAL:	1713.97	1034.44

Central Ground Water Board report on Narmada river

443. SHRI LALIT KISHORE CHATURVEDI: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether Central Ground Water Board has reported that decreasing forest cover and growing pollution has reduced water level of river Narmada, the lifeline of Madhya Pradesh, by 50 per cent;

(b) if so, the details of the report and the reaction of Government thereto;

(c) what steps have been taken to save Narmada from dying; and

(d) whether in spite of Phase I and Phase II antipollution drive, pollution level has increased from 2500 Marginal Pollution Daranges in 1993 to 4500 MLD, at present in Yamuna?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAI PRAKASH NARAYAN YADAV): (a) Central Ground Water Board has not carried out any study regarding decreasing forest cover and growing pollution in river Narmada.